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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,080	12/29/2000	Robert J. Duncan	061473 0270172	3507

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EXAMINER

CLARK, ISAAC R

ART UNIT PAPER NUMBER

2154

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,080

Applicant(s)

DUNCAN ET AL.

Examiner

Isaac R Clark

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/07/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1,2, 4-8, and 10-12 are presented for examination.

Priority

2. The effective filing date for the subject matter in the pending claims in this application is 12/29/2000.

Response to Amendment

3. The rejections to the claims under U.S.C. 112, second paragraph are withdrawn based on the applicant's amendments to the claims.
4. Applicant's arguments filed 10/12/2004 have been fully considered but they are not persuasive.
5. As per claims 1, 2, 6-8, and 12 the applicant argues that Moore et al. (US 6,282,581, hereinafter Moore) and Hedge (US 6,570,875) do not teach using a side channel to communicate flow information to the classification subsystem of the router, and that no motivation has been shown for modifying the flow information taught by Moore to include the socket number as taught by Hedge. The examiner respectfully traverses these remarks.

- a. As per the use of a side channel to communicate flow information, Moore discloses communicating the flow information (not explicitly including socket numbers) using a side channel (col. 7, lines 20-35,. col.10, lines 54-65,. and col.13, lines 11-52) to the classification subsystem of a router (col. 9, lines 10-52,. col.10, lines 32-65,. and col.19, line15-col.20, line 37).

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b. As per the motivation to combine Moore and Hedge, Hedge explicitly teaches that for the IPX protocol, the socket numbers allow identifying applications running on host computers (col. 9, lines 10-15). Thus one of ordinary skill in the art would be motivated to include the socket number information so that these flows could be properly classified to maintain a QOS guarantee (See Hedge lines 20-25).

6. As per claims 4, 5, 10, and 11 the applicant argues that Moore et al. (US 6,282,581, hereinafter Moore) and Hedge (US 6,570,875) using a side channel. The examiner respectfully traverses this argument for the same reason as given in item (a) above.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1,2, 4-8, and 10-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 09/752112. Although the conflicting claims are not

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identical, they are not patentably distinct from each other because the copending application claims a method and apparatus for implementing a general remote procedure call while the current application claims a nearly identical method and apparatus for implementing Java remote method invocation, a specific type of remote procedure call.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, and 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. (hereinafter Moore) US 6,282,581 in view of Hedge, US 6,570,875.

As per claim 1, Moore teaches a method for classifying a remote method invocation from a client system that initiates connections to a remote server object using a client and underlying remote method invocation transport code, the method comprising:

detecting when a connection carrying high value data for the remote method invocation is created (Col. 5 lines 21-25);

using a custom socket factory to obtain flow information associated with the detected connection, and to generate a socket therefor (Col. 10. lines 48-53);

The limitation 'high value data' is interpreted to mean all RMI connection traffic between the client and server that makes a call to the stub. This is consistent with the applicant's definition.

Moore does not explicitly teach the method of claim 1, wherein the flow information including the socket number is sent to a classifying router using a side channel and incorporated into the router sub system.

8. Hedge teaches the apparatus of claim 1 in which the flow information includes the socket number (Col. 8, lines 65-67; Col. 9 lines 1-4, and 45-49) and is sent to the classifying router subsystem (Col. 9, lines 50-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Hedge with Moore because they both teach client server systems using classifying routers to achieve differentiated service routing. Further, Hedge teaches that including the socket number with the flow information allows identifying the application programs when classifying flows (Col. 9, lines 1-4 and 47-53).

9. As per claim 7, Claim 7 is rejected for the same reasons as rejections to claim 1 above.

10. As per claim 2, Moore teaches the method of claim 1, further including that the detection module provides a stub to calling applications that executes an RMI routine when called by an application (Col. 8 lines 54-63; Col. 9 lines 1-4).

11. As per claim 8, Claim 8 is rejected for the same reasons as rejections to claim 2 above.

12. Claim 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Hedge in further view of 'Official Notice"

13. As per claim 4, Moore in view of Hedge does not teach that a classifying client server system for transmitting remote method invocation traffic wherein the side channel is implemented as a Java servlet. However the Examiner takes official notice that the implementation of network modules using Java as the implementation language is well known. It would have been obvious to implement the side channel as a Java servlet in the current invention because doing so would result in a platform independent module that could be used in a variety of network equipment.

14. As per claim 10, Claim 10 is rejected for the same reasons as rejections to claim 4 above.

15. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Hedge further in view of Galyas, US 6,687,226.

As per claim 5, Moore in view of Hedge does not teach the method of claim 1 further including marking the traffic send by the router based on the differentiated services classification.

Galyas teaches the method of claim 1 further including marking the traffic is marked with the differentiated services classification (Col 5. lines 35-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Galyas with the teachings of Moore and Hedge because they each teach client server systems using classifying routers to achieve differentiated service routing. Furthermore, Galyas teaches that marking the traffic with the

differentiated services classification would allow setting appropriate drop priorities based on payload type to prevent overflow in network buffers (Col. 5, lines 27-29).

16. As per claim 11, Claim 11 is rejected for the same reasons as rejections to claim 5 above.

17. Claims 6 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Hedge further in view of Jorgenson, US 6,452,915.

As per claim 6, Moore in view of Hedge does not teach the method of claim 1 further including detecting the identity of the client making the remote procedure call and including the identity in the flow information.

Jorgensen teaches the method of claim 1 further including an IP flow classifier providing differentiated services (Col. 16, lines 28-30) in which the flow information includes the identity of the application requesting service (Col. 16, lines 35-38).

18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Jorgensen with the teachings of Moore and Hedge to because they each teach client server systems using classifying routers to achieve differentiated service routing. Furthermore, Jorgenson teaches that the including an IP flow classifier providing differentiated services in which the flow information includes the identity of the application requesting service would allow differentiating the traffic packets for a particular application into one or more classes of service (Col. 16 lines 29-31).

19. As per claim 12, Claim 12 is rejected for the same reasons as rejections to claim 6 above.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure with respect to showing the state of the art with respect to "Method and apparatus for classifying Java remote method invocation transport traffic".

- | | | | |
|-----|--------------|-------------|--|
| i. | US 6,272,557 | Lim et al. | Object references in distributed client server environment |
| ii. | US 6,487,170 | Chen et al. | Admission control decisions in DiffServ network |

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

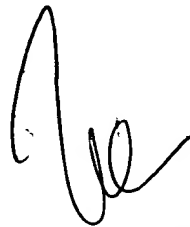
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac R Clark whose telephone number is (571)272-3961. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571)272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IRC



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